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AUTHOR	Baldwin, Norman F.
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ABSTRACT

Seventy mildly to severely mentally retarded adults living in group homes and apartments throughout Pennsylvania were evaluated with an instrument to assess adaptive behavior (Assessment of Basic Competence Scale) on two occasions separated by a 6-month interval. Prior to the initial assessment, direct-service staff participated in a 4-day workshop concerning behavior change strategies. During the next 6 months, staff were offered follow-through consultation regarding implementation of the strategies. Results indicated the following findings: multivariate and univariate differences between residents of group homes and residents of apartments with the latter group showing higher scores on two variables (food preparation and sexual awareness); multivariate and univariate differences between initial and followup adaptive behavior assessments with gains occurring on 27 variables for residents of group homes and apartments; and no differential magnitude of change in adaptive behavior of residents living in group homes compared to apartments. (Author/CL)

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Changes In Adaptive Behavior Among Mentally Retarded Adults In Community Living Arrangements

Norman F. Baldwin

The Pennsylvania State University

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Requests for reprints should be sent to Norman F. Baldwin, CLA Staff Training Program, The Program For Social Science, The Pennsylvania State University, The Capitol Campus, W-352, Middletown, PA 17057.

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ABSTRACT

Changes In Adaptive Behavior Among
Mentally Retarded Adults in Community
Living Arrangements

Seventy mentally retarded adults living in group homes and apartments throughout one state were evaluated with an instrument to assess adaptive behavior on two occasions separated by a six-month interval. Prior to the initial assessment, direct-service staff received a four-day workshop concerning behavior change strategies. During the next six months, staff were offered follow-through consultation in regard to implementation of strategies. Results indicate: (1) multivariate and univariate differences between residents of group homes and residents of apartments with the latter group showing higher scores on three variables (2) multivariate and univariate differences between initial and follow-up adaptive behavior assessments with gains occuring on 27 variables for residents of group homes and apartments and (3) no differential magnitude of change in adaptive behavior of residents living in group homes compared to apartments.

Changes In Adaptive Behavior
Among Mentally Retarded Adults
In Community Living Arrangements

Diminishing financial resources have made it increasingly necessary to document impact of various human services. Recently an increased number of mentally retarded citizens have taken residence in group homes and apartments in various community settings. A logical question arises as to whether community living arrangements (CLA's) do in fact result in positive impact upon residents who are mentally retarded. A number of surveys and studies have investigated the benefits and difficulties in providing residential alternatives in the community (Bergman, 1975; Gollay, 1976; O'Connor & Sitkei, 1975; O'Connor, 1976; Sigelman, 1973; Sitkei, 1976; Webring & Ogren, 1976). However, very little normative data has been published concerning the impact of community residences upon changes in adaptive behavior of mentally retarded individuals who live in group homes or apartments. Reports to date (Aanes and Moen, 1976; Baldwin, 1977[a]; Seevers, 1975) indicate that residents generally show gains in adaptive behavior. Baldwin (1977[b]) reported statistically significant gains using multivariate procedures over six-month intervals.

The present investigation was designed to collect additional normative data concerning the type and magnitude of change in adaptive behavior of residents in various community living arrangements.

METHOD

Subjects

Seventy mentally retarded adults were assessed and reassessed over a six-month period. Fifty-one residents lived in apartments while 19 residents lived in group homes. Residents were identified primarily as mildly

and moderately retarded with remaining residents classified as severely retarded. The mean age of apartment residents was 34.32 years while the mean age of group home residents was 26.28 years. Forty-seven residents were males (33 in apartments; 14 in group homes) and 23 were females (19 in apartments; four in group homes). All residents were enrolled in day programs such as day activities, work adjustment, special education, vocational training or competitive employment.

Procedure

All residents were administered the Assessment of Basic Competence Scale (ABC), an adaptive behavior instrument developed for mentally retarded adults in community settings (Guyett, 1975). The ABC Scale reveals significant correlations with other adaptive behavior instruments within similar domains e.g. self-help; bathing, washing hair, dressing, transportation, budgeting etc. (Gray, 1976). Baldwin (1977[b]) reported significant multivariate gains on the ABC Scale for adults in community settings after staff received training in implementation of an individual program plan. This evidence supports the construct validity of ABC as an assessment of adaptive behavior. The ABC Scale has been used with mentally retarded adults residing in group homes and apartments throughout Pennsylvania for the past two years.

Within six months, the same residents were reassessed by the same staff person. Staff were trained to administer this instrument in two workshops of two-days duration each. Where information was incomplete, staff were encouraged to contact a resident's family and day-program personnel to obtain needed information. Otherwise the item was scored as "no opportunity to observe."

Training

All staff were direct-service personnel who lived with or adjacent to residents. Staff attended a four-day workshop structured around be-

havior modification concepts, practical problem solving in small groups and assessment procedures. After the workshop, each staff participant assessed approximately four residents. Within six months on the average, a reassessment was completed, again with the ABC Scale, administered by the same staff person.

RESULTS

In order to establish that significant differences occurred between initial and follow-up assessments, a multivariate analysis of variance (MANOVA) was undertaken considering all 32 ABC subscales. Using the computer package RUMMAGE, a Wilk's Likelihood Ratio or U statistic was calculated to determine if significant differences occurred when all dependent variables were examined together. Considering initial and follow-up assessments, a Wilk's Likelihood Ratio was calculated for differences between residents of apartments and residents of group homes. A Wilk's U of 0.37 was obtained corresponding to an F ratio approximation (32,37) of 1.95, $p<.05$. Thus a significant difference for all 32 ABC subscales was found between residents of apartments and residents of group homes when initial and follow-up assessment intervals were combined.

A second MANOVA was executed to examine differences between initial and follow-up assessments for residents of group homes and apartments combined. A Wilk's U of 0.35 was obtained corresponding to an F ratio approximation (32,37) of 2.21, $p<.05$. This value indicates significant multivariate differences on the 32 ABC subscales from initial to follow-up assessment intervals for residents of group homes and apartments.

A Wilk's U MANOVA also tested for interaction effects or differential changes from initial to follow-up assessment for residents of apartments and group homes. The Wilk's U obtained was 0.49 corresponding to an F ratio approximation (23,37) of 1.19, $p > .05$. Thus, differences between assessment intervals were proportional for residents of group homes and apartments, using a multivariate analysis of all 32 ABC subscales.

In view of the significant multivariate MANOVA for Groups (type of CLA) and the significant value for Time (initial and follow-up assessment), it appeared justifiable to execute univariate analyses of variance (ANOVA) for these two main effects on the 32 ABC subscales but not for the interactions between the two factors.

Over both initial and follow-up assessments, significant differences between residents of apartments and group homes occurred for food preparation, $F(1,68) = 6.91$, $p = .01$, and sexual awareness, $F(1,68) = 6.40$, $p = .01$. With each of the above subscales, residents of apartments obtained significantly higher scores than residents of group homes.

Significant differences for the main effect, Time (initial compared to follow-up assessment) were obtained on the following dimensions: Personal hygiene, $F(1,68) = 16.69$, $p < .001$; cleaning - repair of clothing, $F(1,68) = 8.94$, $p < .01$; general care of household; $F(1,68) = 8.02$, $p < .01$; food preparation, $F(1,68) = 15.82$, $p < .001$; budgeting, $F(1,68) = 24.51$, $p < .001$; transportation, $F(1,68) = 11.53$, $p = .001$; exercise, $F(1,68) = 4.31$, $p < .05$; verbal communication and comprehension, $F(1,68) = 20.63$, $p < .001$; academic skills, $F(1,68) = 12.04$, $p = .001$; time, $F(1,68) = 19.14$, $p < .001$; telephone usage, $F(1,68) = 10.18$, $p < .01$; use of community resources, $F(1,68) = 35.17$, $p < .001$:

obtaining professional emergency services, $F(1,68) = 19.14$, $p<.001$; leisure activities, $F(1,68) = 13.49$, $p<.001$; friendship skills, $F(1,68) = 7.57$, $p<.01$; search for acquaintances, $F(1,68) = 17.76$, $p<.001$; etiquette, $F(1,68) = 10.64$, $p<.01$; ego strength and self-esteem, $F(1,68) = 19.55$, $p<.001$; sexual awareness, $F(1,68) = 24.96$, $p<.001$; skill and vocational level, $F(1,68) = 5.50$, $p<.05$; response to directions and flexibility, $F(1,68) = 6.31$, $p<.05$; relation to coworkers, $F(1,68) = 5.78$, $p<.05$; assertiveness, $F(1,68) = 25.87$, $p<.001$; facilitating interactions and cooperation, $F(1,68) = 11.47$, $p<.001$; appropriate expression of affection and feelings, $F(1,68) = 9.26$, $p<.01$; adaptability and responsiveness, $F(1,68) = 9.58$, $p<.01$; and responsibility, $F(1,68) = 19.18$, $p<.001$. For each of the above significant differences, mean scores for initial and follow-up assessments are reported in Table 1.

INSERT TABLE 1 ABOUT HERE

On 27 of the 32 ABC Scales, F ratios indicated significant differences between initial and follow-up assessments. Inspection of Table 1 indicates that all such differences were in a positive direction, indicating higher mean adaptive behavior scores at the time of reassessment. It would appear that residents in apartments and group homes revealed significant gains on 84% of all behavior dimensions assessed by the ABC Scale. Gains occurred on a wide range of dimensions from self-help to academic, social integration, personal development, vocational and social development skills.

DISCUSSION

The results indicate that considering all 32 ABC dimensions at one time, a significant MANOVA was obtained for the first factor, Groups (apartments vs. group homes). Over both assessment intervals, residents

of apartments showed higher functional adaptive behavior skills than residents of group homes. However, univariate ANOVA'S indicated that only two dimensions - food preparation, and sexual awareness - significantly differentiated residents in the two types of community living arrangements. The data seems to offer marginal support for the premise that residents of apartments function at a higher level than residents of group homes. In the areas of food preparation and sexual awareness however, this conclusion seems tenable.

The lack of a significant MANOVA for interaction between groups and time, when all 32 ABC dimensions are considered at once, indicates that residents in apartments and group homes show about the same magnitude of gain from initial to follow-up assessment.

Considering residents of apartments and group homes together however, a significant MANOVA indicates differences between initial and follow-up assessments, when all ABC subscales are considered at one time. This finding appeared to justify univariate analyses of each subscale. ANOVA'S indicate that on 27 of the 32 ABC dimensions, significant differences occur over time. The direction of these differences is positive leading to the conslusion that residents in apartments and group homes show gains over a six-month interval. The gains occur not only in self-help, but academic, community adaptation, personal development, constructive employment and social interaction skills.

These trends strongly support the assumption that adaptive behavior of adult residents in community settings changes in a positive direction and that some combination of variables is responsible for the beneficial impact of community living arrangements.

The sample of residents was evenly distributed throughout Pennsylvania in urban and rural areas. However, previous data (Baldwin, 1977[b]) indicate

that staff training may add significantly to the beneficial impact that CLA's have upon residents. Direct-service staff in this investigation received a four-day intensive workshop focused upon behavior management, selection of specific goals, creative problem solving and utilization of assessment profiles in developing an individual program plan. While the design of this study did not permit testing the impact of staff training in the area of individual program planning, it would appear that this might be significantly associated with behavior gains of residents.

These results, when combined with earlier investigations, do seem to strengthen normative trends which indicate that adult residents in community living arragnements, where staff are sensitized to the philosophy and technology of the developmental model, benefit from this service delivery system. Research remains to be undertaken, which indicates what particular variables facilitate positive impact upon mentally retarded citizens, given the normative gains in adaptive behavior previously reported.

REFERENCE NOTES

Baldwin, N.F. Project MAIN - Intensified training for staff in community residences. Paper presented at the meeting of the American Association on Mental Deficiency, New Orleans, Louisiana, June 1977[a].

Baldwin, N.F. Project MAIN - Changes in adaptive behavior of residents in community residential settings. Paper presented at the meeting of Region IX, American Association on Mental Deficiency, Baltimore, Maryland, November 1977[b].

Gray, D.M. Validation of the goal attainment scale. Philadelphia, PA: Division of Research and Evaluation, Office of Mental Health and Mental Retardation, March 1977.

Sitkei, E.G. A two year follow-up on mobility rates for a sample of group homes for developmentally disabled persons, or after group home living - what alternatives? Paper presented at the meeting of the American Association on Mental Deficiency, Chicago, Illinois, June 1976.

REFERENCES

Aanes, D., & Moen, M. Adaptive behavior changes of group home residents. Mental Retardation, 1976, 14, 36-40.

Bergman, J.S. (Ed.) Community homes for the retarded. Boston, MA: Lexington Books, 1975.

Gollay, E. Assessment of the adjustment of deinstitutionalized mentally retarded people to community life. Cambridge, MA: Abt Associates, 1976.

Guyett, I.P. Assessing social competence. Pittsburgh, PA: The Institute For Human Services, Inc., 1975.

O'Connor, G., & Sitkei, G. Study of a new frontier in community services: Residential facilities for the developmentally disabled. Mental Retardation, 1975, 13, 35-39.

O'Connor, G. Home is a good place: A national perspective of community residential facilities for developmentally disabled persons. Washington, D.C.: American Association on Mental Deficiency, Inc., 1976.

Seevers, C.F. An evaluation of the effects of group home living. REAP, 1975, 1, 51-65.

Sigelman, C.K. (Ed.) Group homes for the mentally retarded. Rehabilitation Research and Training Centers in Mental Retardation, Monograph No. 1. Lubbock, Texas: Texas Tech University, 1973.

Webring, K., & Ogren, C. Community residences for mentally retarded people. Arlington, Texas: National Association for Retarded Citizens, 1975.

TABLE 1
ABC Adaptive Behavior Score Means
On Dimensions Where Significant Changes
Occur Over Four - To Six-Month Intervals

Variable/Time	GROUP: Apartments Mean	Apartments S.D.	Group Homes Mean	Group Homes S.D.
Personal Hygiene				
Initial	31.35	6.14	34.95	7.91
Follow-up	34.45	6.56	37.26	9.27
Cleaning, Repair of Clothing				
Initial	22.84	8.62	23.16	9.16
Follow-up	25.59	8.76	26.58	9.87
General Care of Household				
Initial	28.73	9.58	28.68	7.79
Follow-up	30.88	11.26	32.63	11.35
Food Preparation				
Initial	31.45	9.14	24.47	11.38
Follow-up	34.61	9.31	28.42	12.16
Budgeting				
Initial	24.71	12.18	21.84	10.57
Follow-up	28.63	11.54	28.16	10.30
Transportation				
Initial	31.08	10.92	25.26	11.36
Follow-up	33.04	11.32	31.05	9.80
Exercise				
Initial	21.08	8.21	24.21	10.17
Follow-up	23.14	10.10	27.42	10.94
Verbal Communication and Comprehension				
Initial	34.59	8.88	33.84	7.81
Follow-up	36.43	8.27	38.74	7.39
Academic Skills				
Initial	23.14	10.73	26.58	12.99
Follow-up	25.67	11.18	28.42	9.95
Time				
Initial	30.78	12.30	28.16	10.96
Follow-up	33.23	12.88	36.32	11.65

TABLE 1 (Continued)

Variable/Time	GROUP: Apartments Mean	Apartments S.D.	Group Home Mean	Group Home S.D.
Telephone Usage				
Initial	31.18	9.73	28.42	11.43
Follow-up	33.43	10.27	32.37	10.32
Use of Community Resources				
Initial	30.75	8.22	27.21	9.39
Follow-up	33.94	9.02	33.26	7.12
Obtaining Professional and Emergency Services				
Initial	23.43	8.75	23.16	11.08
Follow-up	26.67	7.66	28.42	11.91
Leisure Activities				
Initial	18.53	6.94	20.79	8.57
Follow-up	21.41	7.23	25.10	9.26
Friendship Skills				
Initial	22.98	6.73	22.63	8.40
Follow-up	25.10	8.34	25.53	7.43
Search For Acquaintances				
Initial	21.57	7.27	21.79	10.53
Follow-up	24.39	7.08	26.16	10.05
Etiquette				
Initial	29.71	8.39	27.63	10.19
Follow-up	30.98	8.12	34.21	6.92
Ego Strength				
Initial	24.61	7.35	25.68	5.76
Follow-up	27.80	6.69	29.95	7.93
Sexual Awareness				
Initial	23.53	10.55	16.84	12.93
Follow-up	28.04	10.96	20.00	12.91
Skill and Vocational Level				
Initial	16.76	12.32	10.53	8.64
Follow-up	17.84	12.70	14.21	13.04

TABLE 1 Continued

Variable/Time	GROUP: Apartments Mean	Apartments S.D.	Group Homes Mean	Group Homes S.D.
Response to Directions and Flexibility				
Initial	19.80	15.56	20.00	14.63
Follow-up	21.76	16.30	22.11	17.02
Relation To Coworkers				
Initial	21.96	17.89	20.53	16.82
Follow-up	23.53	17.76	23.16	19.16
Assertiveness				
Initial	24.90	8.09	23.68	8.31
Follow-up	29.47	8.83	28.42	8.98
Facilitating Interactions and Cooperation				
Initial	25.10	8.40	21.32	6.20
Follow-up	27.57	7.89	28.95	7.74
Appropriate Expression of Affection and Feelings				
Initial	30.88	7.53	31.32	6.42
Follow-up	33.69	5.83	32.63	7.14
Adaptability and Responsiveness				
Initial	25.88	8.35	25.53	6.21
Follow-up	28.04	7.62	30.53	9.26
Responsibility				
Initial	29.78	8.62	27.36	6.00
Follow-up	32.69	7.08	33.21	8.56